## COURSE: B.COM (PROG.)

SEMESTER: IV
PAPER: COST ACCOUNTING

## QUESTION BANK

## COST SHEET/SINGLE OUTPUT COSTING/UNIT COSTING

Q. 1 Prepare a "Cost Sheet" for the period ended March 31, 2014.

| Particulars | Units | Rupees |  |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Raw Material: Opening Stock |  | 10,000 |  |  |  |
| Purchases |  |  |  |  | 85,000 |
|  |  | 4,000 |  |  |  |
| Direct Wages Stock |  | 20,000 |  |  |  |
| Direct Expenses |  | 10,000 |  |  |  |
| Factory Overheads |  | $100 \%$ of Direct Labour |  |  |  |
| Office Overheads |  | $10 \%$ of Works Cost |  |  |  |
| Selling and Distribution Expenses |  | Rs. 2/- per unit sold |  |  |  |
| Finished Goods: Opening Stock | 1,000 | 16,320 |  |  |  |
| Production | 10,000 |  |  |  |  |
| Closing Stock | 2,000 | FIFO |  |  |  |

Profit margin is $20 \%$ of the selling price. No work-in-progress.

## Q. 2 Prepare cost sheet.

|  | Units | Rs. |
| :--- | :--- | :--- |
| Sales | 80,000 | $8,00,000$ |
| Material Inventory |  |  |
| 01-01-2014 |  | 40,000 |
| 31-12-2014 |  | 32,000 |
| Work-in-progress inventory |  |  |
| 01-01-2014 |  |  |
| 31-12-2014 | 7,000 |  |
| Finished Goods | 16,000 | 64,000 |
| 01-01-2014 | 24000 | LIFO |
| 31-12-2014 |  | $1,68,000$ |
| Material Purchases |  | $1,32,000$ |
| Direct labour | $1,10,000$ |  |
| Manufacturing Overheads | 44,000 |  |
| General and Administration Expenses |  | 48,000 |
| Selling Expenses |  |  |

Q. 3 From the following data relating to manufacture of a standard product during March 2014, prepare a statement showing cost and profit per unit.

Raw Material used
Direct Wages
Machine Hours worked
Machine Hour Rate
Office overheads
Selling overheads

Rs. 40,000
Rs. 24,000
9,500 hours
Rs. 4 per hour
$20 \%$ of works cost
Re. 1 per unit

Unit produced
Unit Sold

18,000 @ Rs. 10 per unit

## LABOUR

## Q. 1

The cost accountant of Y Ltd. has computed labour turnover rates for the quarter ended 31st March 2005 as $10 \%$, $5 \%$ \& $3 \%$ respectively under flux method, replacement method and separation method. If the number of workers replaced during the quarter is 30 , find out the number of:
(1) Workers recruited and joined
(2) Workers left and discharged

## Q. 2

In a factory, Ram and Sham produce the same product using the same input of same material and at the same normal wage rate.
Bonus is paid to both of them in the from of normal time wage rate adjusted by the proportion which time saved bears to the standard time for the completion of the product. The time allotted to the product is fifty hours. Ram takes thirty hours and Sham takes Forty hours to produce the product. The factory cost of the product for Ram is Rs. 3,100 and for Sham Rs. 3,280. The factory overhead rate is Rs. 12 per man hour.

## Calculate:

(i) Normal wage rate;
(ii) Cost of materials used for the product; and
(iii) Input of material, if the unit material cost is Rs. 16.

## Q. 3

A worker takes 9 hours to complete a job on daily wages and 6 hour on a scheme of payment by result. His day rate is Rs. 75 an hour, the material cost of the product is Rs. 400 and overheads are recovered at $150 \%$ of the total direct wages. Calculate the factory cost of the product under piece-work plan.

## Q. 4

The three workers Govind, Ram and Shyam produced 80, 100 and 120 pieces of a product X on a particular day in May 2016 in a factory. The time allowed for 10 units of product X is 1 hour and their hourly rate is Rs. 40.
Calculate for each of these three workers the following:
(i) Earning for the day
(ii) Effective rate of earnings per hour under:
(a) Straight piece rate plan
(b) Halsey premium bonus plan ( $50 \%$ sharing)
(c) Rowan premium bonus plan of labour remuneration.

## Q. 5

The following information is given to you in respect of a factory deptt. In which 100 workers are employed and the normal working hours are 200 hours per month:

| Basic wages | Rs. 5,000 per month |
| :--- | :--- |
| Dearness allowances | $50 \%$ |
| Employees' subscription to PF | $10 \%$ |

Overtime, if any, is paid at double the normal basic wage rate plus DA. Employer's contribution to PF is at equal rate with the employees.
You are required to calculate for a particular month the total labour cost and the labour costs of Jobs X and Jobs Y on which workers were employed in the proportion 3:2. Overtime of 10 hours was worked on job X only.

## MATERIAL: ECONOMIC ORDER QUANTITY (EOQ)

## Q. 1

A, a refrigerator manufacturer purchases 1,600 units of certain component from B. His annual usage is 1,600 units. The order placing cost is Rs. 100 and the cost of carrying one unit for a year is Rs. 8. (i) Calculate economic ordering quantity, (ii) Tabulate your results.
Q. 2

The Ganges Pump Company uses about 75,000 valves per year.
The valves cost Rs. 1.50 per unit when bought in quantities and the carrying cost is estimated to be $20 \%$ of average inventory investment on the annual basis. The cost to place an order and process the delivery is Rs. 18.
It takes 45 days to receive delivery from the date of an order and a safety stock of 3,250 valves is desired.
You are required to determine:
(a) The most economical order quantity and number of orders to be placed.
(b) The EOQ if the valves cost Rs. 6.00 each instead of Rs. 1.50 each.
(c) Order Point

## MATERIAL: STOCK LEVELS

## Q. 3

Two components A and B are used as follows:

Normal usage
Minimum usage
Maximum usage
Re-order quantity
Re-order period

50 units per week each
25 units per week each
75 units per week each
A: 300 units
B: 500 units
A: 4 to 6 weeks
B: 2 to 4 weeks

Calculate for each component: (a) Re-order, (b) Minimum, (c) Maximum \& (d) Average stock level

## Q. 4

In manufacturing its product X , a company uses two types of raw materials A and B in respect of which the following information is supplied-
One unit of X requires 10 kilogram of A and 4 kilogram of B materials. Price per kg of A materials is Rs. 10 and that of B is Rs. 20. Re-order quantity of A and B materials are $10,000 \mathrm{~kg}$ and $5,000 \mathrm{~kg}$. Re-order levels of A and B materials are $8,000 \mathrm{~kg}$ and $4,750 \mathrm{~kg}$ respectively. Weekly production of $X$ varies from 175 units to 225 units, averaging 200 units. Delivery period of A material is 1 to 3 weeks and B material is 3 to 5 weeks. Compute: (a) Minimum stock level of A, and (b) Maximum stock level of B.

## INVENTORY VALUATION

Q.5. The following are the details of a spare part purchased and consumed by M/S Sriram Mills;

| 01.01 .14 | Opening Stock | 050 Units @ Rs. 29 per Units |
| :--- | :--- | :--- |
| 10.01 .14 | Purchase | 050 Units @ Rs. 31 per Units |
| 15.01 .14 | Issued for Consumption | 050 Units |
| 01.02 .14 | Purchases | 200 Units @ Rs. 40 per Units |
| 15.02 .14 | Issued for Consumption | 100 Units |
| 20.02 .14 | Issued for Consumption | 100 Units |


| 01.03 .14 | Purchases | 150 Units @ Rs. 50 per Unit |
| :--- | :--- | :--- |
| 15.03 .14 | Issued for Consumption | 100 Units |

Find out: (i) Value of stock as on $31.03 .14, \&$ (ii) cost of raw material used If the Company follows: A) FIFO, B) LIFO \& C) WAM under: (I) Periodical, (II) Perpetual Inventory System

## OVERHEADS - GENERAL

## Q. 1

A factory incurred the following expenditure in 2013:

Rs.
Direct Materials
50,000
Direct Wages
Factory Overheads: Fixed
Variable

30,000
15,000
10,000
25000

In 2014 it is expected that:
(a) There will be an increase in output on account of $50 \%$ more workers.
(b) Efficiency will come down by $10 \%$ on account of employment of new workers.
(c) There will be increase of $20 \%$ in fixed overheads.
(d) Cost of Direct Materials will come down by $5 \%$.

Variable overheads vary with no. of workers employed. Draw up the budget for 2014.

## OVERHEADS DISTRIBUTION

## Q. 2

In a Light Engineering Factory, the following particulars have been collected for the three monthly period ending $31^{\text {st }}$ December 2018. Compute the departmental overhead rates for each of the production department assuming that overheads are recovered as a percentage of direct wages.

| Particulars | Production Departments |  | Service <br> Departments |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | A | B | C | D | E |
| Direct Wages | Rs. | 20,000 | 30,000 | 40,000 | 10,000 | 20,000 |
| Direct Materials | Rs. | 10,000 | 20,000 | 20,000 | 15,000 | 15,000 |
| Staff | Nos. | 100 | 150 | 150 | 50 | 50 |
| Electricity | Kwh. | 4,000 | 3,000 | 2,000 | 1,000 | 1,000 |
| Light Points | Nos. | 10 | 16 | 4 | 6 | 4 |
| Asset Value | Rs. | 600,000 | 400,000 | 300,000 | 100,000 | 100,000 |
| Area Occupied | Sq. yds. | 150 | 260 | 80 | 20 | 90 |

The expenses for the period were:

| Particulars | Rs. |
| :--- | :--- |
| Motive Power | 5,500 |
| Lighting Power | 1,000 |
| Stores overheads | 4,000 |
| Amenities to staff | 15,000 |
| Depreciation | 150,000 |
| Repair and Maintenance | 30,000 |


| General overheads | 60,000 |
| :--- | :--- |
| Rent and Taxes | 3,000 |

Apportion the expenses of service department E proportionate to "Direct Wages" and those of service department D in the ratio of 5:3:2 to Deptts A, B and C respectively.

## Q. 3

From the following information work out the production hour rate of recovery of overheads in Departments $A, B$ and $C$.

|  | Production Deptts. |  | Service Deptts. |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | A | B | C | D | E |
|  | Rs. | Rs. | Rs. | Rs. | Rs. |
| Rent | 200 | 400 | 150 | 150 | 100 |
| Electricity | 50 | 80 | 30 | 20 | 20 |
| Fire Insurance | 80 | 160 | 60 | 60 | 40 |
| Plant Depreciation | 1,000 | 1,500 | 1,000 | 300 | 200 |
| Transport | 47 | 44 | 47 | 100 | 150 |
| Estimated Working Hours | 1,000 | 2,500 | 1,800 |  |  |

Expenses of the service departments D and E are apportioned as under:

|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| D | $30 \%$ | $40 \%$ | $20 \%$ | - | $10 \%$ |
| E | $10 \%$ | $20 \%$ | $50 \%$ | $20 \%$ | - |

## OVERHEADS DISTRIBUTION: MACHINE HOUR RATE

## Q. 1

The following annual charges are incurred in respect of a machine in a shop where manual labour is almost nil and where work is done by means of five machines exactly of similar type and specification.

|  |  | Rs. |
| :--- | :--- | :--- |
| 1. | Rent and Rates (proportional to the floor space occupied) | $4,80,000$ |
| 2. | Depreciation on each machine | 60,000 |
| 3. | Repairs and maintenance for the five machines | $1,20,000$ |
| 4. | Power consumed (as per meter) @ Rs.5 per unit for the shop | $6,00,000$ |
| 5. | Electric charges for light in the shop | 51,000 |
| 6. | Attendants: There are two attendants for the five machines and they are each paid <br> Rs. 6000 per month | Supervision: For the five machines in the shop there is one supervisor whose <br> emoluments are Rs. 25000 p.m. |
| 8. | Sundry supplies such as Lubricants, Jute and cotton Waste etc. for the shop | 45,000 |
| 9. | Hire Purchase Installments payable for the machine (including Rs. 3000 as interest) <br> The machine uses 10 units of power per hour. Calculate the machine hour rate for the <br> machine for the year. | 12,000 |

## Q. 2

A manufacturing company uses two identical large and four identical small machines. Each large machine occupies one quarter of the workshop and fully employs three workers; each small machine occupies half the space of a large machine and fully employs two workers. The workers are paid by piecework.

Each of the six machines is estimated to work 1,440 hours per year, while the effecting working life is taken as 12,000 working hours for each large machine and 9,000 working hours for each small machine. Large machines cost Rs. 20,00,000 each, and small machines Rs. 4,00,000 each. Scrap values are Rs.2,00,000 and Rs. 40,000 respectively.
Repairs, maintenance and oil are estimated to cost for each large machine Rs. $3,00,000$ and each small machine Rs. $1,80,000$, during its effective life. Power consumption costs Rs. 5 per unit, and amounts for a large machine to 20 units per hour, and for a small machine to 2 units per hour. The manager is paid Rs. 4,80,000 a year, and the workshop supervision occupies half his time which is divided equally among the six machines. Details of other expenses are:
Rent and rates of the workshop: Rs. 6,40,000 a year. Lighting (to be apportioned in the ratio of workers employed) Rs. 1,68,000 a year.
Taking a period of three months as a basis, calculate the machine hour rate for a large machine and a small machine respectively.

## ABSORPTION RATE

Q. 1

The following information relates to the activities of a production department for the month of January, 2010:

|  | Rs. |
| :--- | :--- |
| Materials used | 72,000 |
| Direct wages | 60,000 |
| Machine hours | 20,000 |
| Labour hours | 24,000 |
| Overheads chargeable to the department | 48,000 |

On one order to be carried out in the month of February 2010, the relevant data were--

| Material |  | 4,000 |
| :--- | :--- | :--- |
| Direct wages |  | 3,300 |
| Machine hours | 1,200 |  |
| Labour hours | 1,650 |  |

Calculate the cost of this order by using the following methods of absorption of overheads---
(i) Direct labour hour rate;
(ii) Percentage of direct wages; and
(iii) Machine hour rate.

## Q. 2

A company has budgeted Rs. 5,00,000 for variable overheads and Rs. 8,00,000 for fixed overheads for the year. The overheads are recovered on the basis of the machine hours. The company has budgeted for $1,00,000$ machine hours for the year. During the year, the company used 95,000 machine hours for the actual output. Actual costs incurred for the fixed and variable manufacturing overheads were Rs. 8,00,000 and Rs. 4,70,000 respectively.
Required:
(i) Compute the over or under recovered variable manufacturing overhead amount.
(ii) Compute the over or under recovered fixed manufacturing overhead amount.
(iii) Compute the over or under recovered total manufacturing overhead amount.

## ACTIVITY BASED COSTING

## Q. 1

A company, manufacturing two products, furnishes the following data for a year.

| Products | Annual output (units) | Total machine <br> hours | Total number of <br> purchase orders | Total numbers of <br> set - ups |
| :--- | :--- | :--- | :--- | :--- |
| A | 5,000 | 20,000 | 160 | 20 |
| B | 60,000 | $1,20,000$ | 384 | 44 |

The annual overheads are as under: Rs.
Volume related activity costs
Set-up related costs
5,60,000
Purchase related costs
Purchase related costs 8,16,000
You are required to calculate the overheads per unit of each product A and B bases on:
(i) Traditional method of charging overheads.
(ii) Activity based costing method.

## RECONCILIATION OF COST AND FINANCIAL ACCOUNTS

## Q. 1

The net profit of Nidhi Limited according to financial accounts was Rs. 84,377. Prepare Reconciliation Statement and find out profit shown by cost accounts.
(i) Depreciation charged in financial accounts Rs. 5,600 while recovered in cost accounts Rs. 6,250.
(ii) Works overheads under-absorbed in cost accounts Rs. 1,560 while office overheads over-recovered in cost accounts Rs. 850
(iii) Interest income not included in cost accounts Rs. 4,000.
(iv) Loss due to obsolescence charged in financial accounts Rs. 2,850.
(v) Bank interest and dividend received Rs. 375.
(vi) Income-tax paid Rs. 20,150.
(vii) Loss due to depreciation in inventories charged in financial accounts Rs. 3,375.
(viii) Stores adjustment (credited in financial accounts) Rs. 237.

## Q. 2

The following Profit and Loss Account for the year ending 31 ${ }^{\text {st }}$ March, 2012 has been extracted from the books of A Ltd.
PROFIT AND LOSS ACCOUNT
for the year ending 31-3-2012

|  | Rs. |  | Rs. |
| :--- | :--- | :--- | :--- |
| To Direct Material | 10,000 | By Sales | 50,000 |
| To Direct Labour | 20,000 | By work-in-progress in hand |  |
| To Factory Expenses | 9,500 | Rs. |  |
| To Administration Expenses | 5,200 | Direct Labour 600 |  |
| To Selling and Distribution Expenses | 3,800 | Direct Material 400 |  |
| To Interest on Capital | 1,000 | Factory Expense 300 |  |
| To Goodwill written off | 1,500 | By Finished Stock-in-hand | 1,300 |
| To Net Profit | 3,000 |  | 2,700 |
|  | 54,000 |  | 54,000 |

Cost Accounts manual states that the factory overheads are to be recovered at $50 \%$ of direct wages, administration overheads at $10 \%$ of work-cost and selling and distribution overheads @ Re. 1 per unit sold.

The units of product sold and in-hand were 4,000 and 257 respectively.
Prepare:
(1) Statement of cost and profit as per Cost Accounts.
(2) Reconciliation Statement.

## OPERATING COSTING

## Q. 1

A lorry starts with a load of 24 tonnes of goods from station A. It unloads 10 tonnes at station B and rest of goods at station C. It reaches back directly to station A after getting reloaded with 16 tonnes of goods at station C. The distance between A to B, B to C and then from C to A are $270 \mathrm{kms}, 150 \mathrm{kms}$ and 325 kms respectively. Compute 'Absolute tonne-kms' and 'Commercial tonne-kms.

## Q. 2

A transport company charges Rs. 1200 per ton for a 5 tons lorry load from station A to station B. The charges for return trip are Rs. 1100 per ton. In the month of July, 2014, a truck has made 10 outward journeys with full load out of which 3 tons were unloaded twice at C -station on the way. It returned without any load once from C station to A .

$$
\begin{array}{lr}
\text { The expenses incurred were: } & \text { Rs. } \\
\text { Annual fixed charges } & 414180 \\
\text { Annual maintenance charges } & 138060 \\
\text { Monthly running charges: } & 23010
\end{array}
$$

You are required to find the cost per-ton-kilometer (absolute) and the profit for the month of July, 2014 assuming that no concession is made for delivery at the intermediate stations.
Distance from A-station to B-station is 210 kms , and from A-stations to C-station 120 kms . The truck carried a load of 8 tons 5 times while returning from B-station but it was once caught by the police and was fined Rs. 20,000.

## Q. 3

A transport company has been given a 40 kilometer long route to run 5 buses. The cost of each bus is Rs. $61,44,000$. The buses will make 3 round trips per day carrying on an average 80 percent passenger of their seating capacity. The seating capacity of each bus is 40 passengers. The buses will run on an average 25 days in a month. The other information for the year 2018-19 are given below:

| Garage rent | Rs. 4,000 per month |
| :--- | :--- |
| Annual repairs and maintenance | Rs. 23,040 each bus |
| Salaries of driver | Rs. 20,000 each per month |
| Wages of conductors | Rs. 15,000 each per month |
| Manager's salary | Rs. 25,000 per month |
| Road tax, permit fee etc. | Rs. 13,225 per bus for a | quarter

Office expenses Rs. 5,000 per month

Cost of diesel per liter
Rs. 76.80
Kilometers run per liter for each bus
6 kilometers
Annual depreciation
15\%
Annual Insurance
Rs.107,500
You are required to calculate the bus fare to be charged from each passenger per kilometer, if the company wants to earn profit of $33^{1 / 3}$ percent on taking (total receipts from passengers).

## Q. 4

A transport company has been given a 20 km long route to run a bus. The bus costs Rs. $72,00,000$ and has been insured @ $5 \%$ p.a. While annual taxes amount to Rs. 96,000 , garage rent is Rs. 10,000 p.m. Yearly repairs will be Rs. $1,44,000$ and the bus is likely to last for 5 years.
The driver's salary will be Rs. $3,00,000$ p.a. and that of conductor's Rs. $1,68,000$ p.a. In addition they are also entitled to $10 \%$ of the takings as commission (to be shared by them equally). Cost of stationery will be Rs. 60,000 p.a., manager's salary is Rs. 40,000 p.m. who also looks after accounts.

Diesel and oil will be Rs. 1,600 per 100 km . The bus will make 3 trips carrying on an average 40 passengers on each trip. Assuming $25 \%$ profit on takings, calculate the bus fare to be charged from each passenger. The bus runs on an average 25 days in a month.

Keerti Transport Ltd. operates a fleet of Lorries. The records for lorry: L-14 reveals the following information for September, 2018:

$$
\text { Days maintained : } 30
$$

Days operated : 25
Days idle : 5
Total hours operated : 300
Total kms. : 2,500
Total tonnage carried : 250
(per trip onward 4 tonne, return 1 tonne per trip)
Total cost for the month : Rs. 2,70,000
Prepare a performance statement showing:
(i) Cost per day operated
(ii) Cost per kilometer
(iii) Cost per hour
(iv) Cost per round-trip
(v) Cost per commercial tone-km.

## JOB COSTING

## Q. 1

Following information has been extracted from costing records of Jai Engineering Works in respect of Job No. 28:

| Materials | Rs. 3,440 |
| :--- | :--- |
| Wages |  |
| Departments | A-60 hours @ Rs. 3 per hour |
|  | B-40 hours @ Rs. 2 per hour |
|  | C-20 hours @ Rs. 4 per hour |

Overheads for these three departments are estimated as follows:
Variable overheads:
Department A Rs. 4,000 for 4,000 direct labour hours
B Rs. 3,000 for 1,500 direct labour hours
C Rs. 1,000 for 500 direct labour hours
Fixed overheads:
Estimated at Rs, 10,000 for 10,000 normal working hours.
You are required to calculate the cost of Job No. 28 and calculate the price to be charged so as to give a profit of $20 \%$ on selling price.

## CONTRACT COSTING

## Q. 1

How much profit be credited to Profit and loss Account in the following case:

| Contract price | $20,00,000$ |
| :--- | ---: |
| Cost incurred | $11,20,000$ |
| Cash received $(90 \%$ of work certified) | $10,80,000$ |
| Work not certified | $1,20,000$ |

A company undertook a contract for a total of Rs. 24, 00,000. Prepare a Contract Account for the year ending $31^{\text {st }}$ March, 2018 from the following particulars:
(i) Wages Rs. 6, 00,000
(ii) Plant Rs. 2, 00,000
(iii) Materials Rs. 3, 00,000
(iv) Overheads Rs. 1, 20,000
(v) Depreciation @ $10 \%$ to be provided on plant.
(vi) Materials lying at the site on $31^{\text {st }}$ March, 2018 Rs. 40,000
(vii) Work certified was to the extent of Rs. 16, 00,000 and $80 \%$ of the same was received in cash.
(viii) $5 \%$ of the value of materials issued and $6 \%$ of the wages may be taken to have been incurred for the portion of the work completed but not yet certified.
(ix) Overheads are charged as percentage of direct wages.
(x) Ignore depreciation on plant for use on uncertified portion of the work.
(xi) Ascertain notional profit and the amount to be transferred to Profit and Loss Account.
(xii) Show the workings clearly
(xiii) Also show relevant items in balance sheet.

## Q. 3

Modern Construction Ltd. has taken two contracts on $1^{\text {st }}$ April 2015. The position of contracts on $31^{\text {st }}$ March 2016 is as follows:

| Contract 1 | Contract 2 |
| ---: | ---: |
| $27,00,000$ | $60,00,000$ |
| $5,80,000$ | $10,80,000$ |
| $11,74,000$ | $17,20,000$ |
| 28,000 | 60,000 |
| $1,60,000$ | $3,00,000$ |
| 40,000 | 60,000 |
| 14,000 | 16,000 |
| 4,000 | 9,000 |
| $16,00,000$ | $30,00,000$ |
| $12,00,000$ | $22,50,000$ |
| 80,000 | 90,000 |

Contract Price
27, 00,000
60, 00,000
Materials
Wages Paid
11, 74,000
17, 20,000
Other expenses
Plant at site
Unused materials at site
Wages Prepaid
14,000
16,000
Other expenses due
Work Certified
16, 00,000
30, 00,000
Cash received
80,000
90,000
Work Completed but not yet certified
The Plant at site is to be depreciated at $10 \%$
Prepare the contract account in respect of each contract showing the notional profit and also the profit to be transferred to Profit \& Loss account.

## Q. 4

The following information relates to a building contract for Rs. 10,00,000:

| During 2015 | During 2016 |
| ---: | ---: |
| $3,00,000$ | 84,000 |
| $2,30,000$ | $1,05,000$ |
| 22,000 | 10,000 |
| 6,000 | 1,400 |
| $7,50,000$ | $2,50,000$ |
| 8,000 | -- |
| 5,000 | 7,000 |
| 14,000 | 2,000 |
| $6,00,000$ | $4,00,000$ |

The value of plant at the end of 2015 and 2016 was Rs. 7,000 and Rs. 5,000 respectively. Prepare (i) Contract Account,(ii) Contractee Account for two years 2015 and 2016 taking into consideration such profit for transfer to profit and Loss Account as you think proper. Also show relevant items in the Balance Sheet.

Compute a conservative estimate of profit on a contract (which has been $90 \%$ complete) from the following particulars. Illustrate 4 methods of computing the profit transferable to Profit \& Loss Account.
(Rs.)

| Total expenditure to date | $4,50,000$ |
| :--- | ---: |
| Estimated further expenditure to complete the contract | contingencies) |
| (Including |  |
| 25,000 | $6,12,000$ |
| Contact price | $5,50,800$ |
| Work certified | 34,000 |
| Work uncertified | $4,40,640$ |
| Cash received |  |

## PROCESS COSTING

## Q. 1

Calculate the number of units introduced in Process A if the output of the Process is 1030 units, abnormal loss is 50 units and normal loss is $10 \%$ of input.

## Q. 2

From the information given below, prepare:
(i) Process A Account
(ii) Abnormal Loss Account

1,000 tons @ Rs. 125 per ton were initially introduced in the process.
Wages Rs. 28,000
Factory Overheads Rs. 8,000
Normal Wastage 5\% of total weight of material initially introduced
Output 830 tons
Normal Scrap $10 \%$ of the initial quantity introduced
The scrap realizes Rs. 80 per ton.

## Q. 3

2,000 units costing Rs. 4 per unit were introduced to Process I. Labour costs and other expenses were Rs. 1,080 and Rs. 120 respectively. Its output was 1,900 units. The normal scrap was $10 \%$ of the input and has a realizable value of Re. 1 per unit. Prepare Process I Account, Normal Loss Account and Abnormal Gain Account.

## Q. 4

A product passes through three processes, $\mathrm{A}, \mathrm{B}$ and C .
10,000 units were issued to Process A in the beginning of October, 2018 at a cost of Rs. 1 per unit. The other expenses were as follows:
Process A Process B Process C
Sundry Materials $\quad 1,000 \quad 1,500 \quad 500$

| Labour | 5,000 | 8,000 | 6,500 |
| :--- | :--- | :--- | :--- |


| Direct expenses | 1,050 | 1,188 | 2,009 |
| :--- | ---: | ---: | ---: |

$\begin{array}{lrrr}\text { Normal Wastage } & 3 \% & 5 \% & 8 \% \\ \text { S.P. of Wastage per Unit (Rs.) } & 0.25 & 0.50 & 1\end{array}$
Actual Output was (Units) 9,500 9,100 8,100
Assuming that there were no opening or closing stocks prepare
(i) Process Accounts.
(ii) Abnormal Wastage,
(iii) Abnormal Effectives and
(iv) Costing Profit \& Loss Accounts.

## PROCESS COSTING - WORK-IN-PRGRESS EQUIVALENT UNITS

## Q. 1

1,000 units were introduced in process I. The cost per unit being Rs. 80. Labour and manufacturing expenses were Rs. 42,750 and Rs. 22,500 respectively. 800 units were completed and the remaining units were considered as $100 \%, 75 \%$ and $50 \%$ complete as regards to material cost, labour and manufacturing expenses respectively. Prepare
(i) Statement of Equivalent Production
(ii) Statement of cost per unit
(iii) Evaluation statement
(iv) Process Account

## Q. 2

A product passes through two processes A and B. From the following particulars relating to process A , find out equivalent production and prepare the relevant accounts.
Units introduced in process A - 2,000 valued at Rs. 5,800
Amount spent as labour and production overhead:
Rs. 3,340 and 1,670 respectively.
Direct material introduced during the process - Rs. 1,440.
1,400 Completed units were produced in process A and transferred to process B, Incomplete units 460 .
Units scrapped 140 and sold at Re. 1 per unit.
The normal process loss was estimated at $5 \%$ on input.
It was estimated that incomplete units had reached a stage in production as follows:
Materials (including units introduced) $75 \%$ completed
Labour $50 \%$ completed
Overhead 50\% completed

## Q. 3

The following information relates to Process ' A ';
Opening Work in Progress 2,000 units: Rs. 9,920 (Materials Rs. 7,120, Labour Rs. 1565 and Overheads Rs. 1235)
Units introduced during the period. 10,000
The following costs were incurred during the period
Material cost Rs. 90,080
Labour Cost Rs. 41,500
Overheads
Rs. 16,600
Output transferred to next process
7,500 units
Scrapped units
Normal Loss
Degree of Completion
Opening WIP
Closing WIP
$10 \%$ of total input (Sold @ Rs. 1.00 per unit)
Material Labour Overheads
$40 \% \quad 20 \% \quad 20 \%$
$\begin{array}{lll}\text { Closing WIP } & 60 \% & 30 \%\end{array}$

Prepare the Process ' A ' $\mathrm{A} / \mathrm{c}$ assuming FIFO method of closing stock valuation.
Q. 4

Solve the above Question again assuming that the degree of completion in respect of the various element of opening work-in-progress is not given.

